

In the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1 1. (Original) A method of operating an integrated circuit
2 including read accessible memory comprising the steps of:
3 testing memory read operations beginning at a maximum speed at
4 successively slower speeds until all memory reads pass;
5 determining memory read program bits for a highest memory
6 speed passing the memory read tests; and
7 programming write once bits according to determined memory
8 read program bits.

1 2. (Original) The method of claim 1 further comprising the
2 steps of:
3 preliminary soft programming determined bits; and
4 testing non-memory portions of the integrated circuit using
5 soft programmed determined memory read program bits.

1 3. (Original) The method of claim 1 wherein:
2 said step of programming write once bits includes
3 applying program voltages to the bits,
4 testing the write once bits to determine achieved
5 programming, and
6 repeating applying program voltages and testing the write
7 once bits until the testing confirms correct write once bit
8 programming.

1 4. (Currently Amended) The method of claim 1 wherein
2 programming of ~~eFuse~~ write once bits includes:
3 merging of programming of write once bits for memory read
4 speed with programming write once bits not related to memory speed.

1 5. (Original) The method of claim 4 wherein:
2 the write once bits not related to memory speed include a
3 specific die-identification bit code.

1 6. (Original) The method of claim 4 wherein:
2 the write once bits not related to memory read speed include
3 write once bits for memory redundancy programming.

1 7. (Original) The method of claim 4 wherein:
2 the write once bits not related to memory read speed include
3 write once bits for control of programmable logic functions.

1 8. (Original) The method of claim 1, wherein the read
2 accessible memory is write accessible, further comprising:
3 testing memory write operations beginning at a maximum speed
4 at successively slower speeds until all memory reads pass;
5 determining memory write program bits for a highest memory
6 speed passing the memory write tests; and
7 said step of programming write once bits according to
8 determined memory read program bits further includes programming
9 write once bits according determined memory write program bits.

1 9. (Original) A method of operating an integrated circuit
2 including write accessible memory comprising the steps of:
3 testing memory write operations beginning at a maximum speed
4 at successively slower speeds until all memory writes pass;
5 determining memory write program bits for a highest memory
6 speed passing the memory write tests; and
7 programming write once bits according to determined memory
8 write program bits.

1 10. (Original) The method of claim 9 further comprising the
2 steps of:
3 preliminary soft programming determined write once bits; and
4 testing non-memory portions of the integrated circuit using
5 soft programmed determined memory write program bits.

1 11. (Original) The method of claim 9 wherein:
2 said step of programming write once bits includes
3 applying program voltages to the write once bits,
4 testing the write once bits to determine achieved
5 programming, and
6 repeating applying program voltages and testing the write
7 once bits until the testing confirms correct write once bit
8 programming.

1 12. (Original) The method of claim 9 wherein:
2 programming of write once bits includes merging of programming
3 of write once bits for memory write speed with programming write
4 once bits not related to memory speed.

1 13. (Original) The method of claim 12 wherein:
2 the write once bits not related to memory write speed include
3 a specific die-identification bit code.

1 14. (Original) The method of claim 12 wherein:
2 the write once bits not related to memory write speed include
3 write once bits for memory redundancy programming.

1 15. (Original) The method of claim 12 wherein:
2 the write once bits not related to memory write speed include
3 write once bits for control of programmable logic functions.

16 to 18. (Canceled)

1 19. (New) The method of claim 1 further comprising the steps
2 of:
3 operating memory read operations of the read accessible memory
4 at a speed corresponding to the programmed write once memory read
5 program bits.

1 20. (New) The method of claim 8 further comprising the steps
2 of:
3 operating memory write operations of the read accessible
4 memory at a speed corresponding to the programmed write once memory
5 write program bits.

1 21. (New) The method of claim 9 further comprising the steps
2 of:
3 operating memory write operations of the write accessible
4 memory at a speed corresponding to the programmed write once memory
5 write program bits.